

## CLAIMS:

1. A method of scheduling broadcasts in a self-organizing network (100), the method comprising the steps of:
  - transmitting a broadcast comprising presence information from a first device to its neighboring devices in the self-organizing network every period  $T_B$ ,
- 5 characterized in that the transmission of a broadcast comprising presence information from the first device is skipped if all its neighbors have received the broadcast from the first device during a period  $T_{CB}$ .
2. A method as claimed in claim 1, characterized in that the transmission of the
- 10 broadcast comprising presence information from the first device is skipped during a second part of the period  $T_{CB}$  if all its neighbors have received the broadcast from the first device during a first part of period  $T_{CB}$ .
3. A method as claimed in claim 1, characterized in that a broadcast comprising
- 15 presence information transmitted from a device further comprises information on whether the device has received a broadcast from each device in a list of neighboring devices.
4. A method as claimed in claim 3, characterized in that the broadcast transmitted from the device comprises a *skip broadcast bit*, which is set if a broadcast comprising
- 20 presence information has been received from each device in the list of neighboring devices in the current  $T_{CB}$ .
5. A method as claimed in claim 4, characterized in that the broadcast transmitted from the device comprises a *skip broadcast bit*, which is set if both of the following
- 25 conditions are met:
  - $(t_{CB(i), \text{next}} - t) > T_B$ ;
  - a broadcast comprising presence information has been received from each device in the list of neighboring devices in the current  $T_{CB}$ ,where  $t_{CB(i), \text{next}}$  is the next instant in time, at which the device is arranged to check from

which devices it has received broadcasts comprising presence information and  $t$  is the current time.

6. A method as claimed in claim 4, characterized in that the device will skip a broadcast if all broadcasts comprising presence information from devices in the list of neighboring devices in the current period  $T_{CB}$  have the *skip broadcast bit* set.

7. A method as claimed in claim 6, characterized in that the device will skip a broadcast if both of the following conditions are met:

10 - all broadcasts comprising presence information from devices in the list of neighboring devices in the current period  $T_{CB}$  have the *skip broadcast bit* set;

-  $(t_{CB(j), next} - t) > T_B$ ,

where  $t_{CB(j), next}$  is the next instant in time, at which the device is arranged to check from which devices it has received broadcasts comprising presence information and  $t$  is the current time.

8. A method as claimed in claim 4, characterized in that a device will skip a broadcast if  $(t_{CB(j), next} - t) > T_B$ , and if one of the following conditions is met:

20 - all broadcasts comprising presence information from devices in the list  $N_j$  of neighboring devices in the current period  $T_{CB}$  have the *skip broadcast bit* set

OR

- all broadcasts comprising presence information received from devices in  $M_k$ , where  $M_k \subset N_j$ , during the current check beacon period have the *skip broadcast bit* set AND the devices in  $N_j \setminus M_k$  are not in the "LAST\_KNOWN\_BEACON" field of any of the

25 broadcasts transmitted from the devices in the list  $M_k$ ,

where the "LAST\_KNOWN\_BEACON" field indicates from which device a broadcast comprising presence information has been received at the earliest instant during the current check beacon period  $T_{CB}$ ;  $t_{CB(i), next}$  is the next instant in time, at which the device is arranged to check from which devices it has received broadcasts comprising presence information; and

30  $t$  is the current time.

9. A method as claimed in claim 1, characterized in that  $T_B < T_{CB}$ .

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10. A method as claimed in claim 9, characterized in that  $T_{CB} = N * T_B$ , where  $N \in$

$N +$ .

11. A device performing the method as claimed in claim 1.

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12. A self-organizing network comprising devices performing the method as claimed in claim 1.

13. A computer program product comprising a program of computer instructions for making a programmable computer perform the method as claimed in claim 1.